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DATE MAILED: 05/05/2010

NOTICE OF ALLOWANCE AND FEE(S) DUE

77042	7590	05/05/2010		EXAM	MINER			
Perkins Coie LLP				LE, MI	LE, MIRANDA			
P.O. Box 12				ART UNIT	PAPER NUMBER			
Seattle, WA	98111-1208			2159				

 APPLICATION NO.
 FILINO DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10800.163
 03/12/2004
 Vijay Deshmukh
 67272-8062.US01
 9062

TITLE OF INVENTION: METHOD AND APPARATUS FOR REPRESENTING FILE SYSTEM METADATA WITHIN A DATABASE FOR EFFICIENT

QUERIES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	08/05/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. In equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includir d below or directed oth ions.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a							
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying pagers. Each additional pager, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
77042	7590 05/05	/2010						of Mailing or Transi		
Perkins Coie Ll P.O. Box 1208 Seattle, WA 981					I her State addr trans	reby certify that the es Postal Service wessed to the Mail smitted to the USP	is Fee(: vith suf Stop TO (57	s) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the da	deposited wi t class mail is above, or be tte indicated b	th the United n an envelope ing facsimile below.
									(I	Depositor's name)
										(Signature)
										(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRMA	TION NO.
10/800,163	03/12/2004			Vijay Deshmukh			67	272-8062.US01	900	62
TITLE OF INVENTION: QUERIES										
APPLN, TYPE	SMALL ENTITY	IS:	SUE FEE DUE	PUBLICATION FEE D	DUE	PREV. PAID ISSU	S FEE	TOTAL FEE(S) DUE		E DUE
nonprovisional	NO		\$1510	\$0		\$0		\$1510	08/0	5/2010
EXAM	INER		ART UNIT	CLASS-SUBCLASS	3					
LE, MIR			2159	707-825000						
"Fee Address" indi PTO/SB/47; Rev 03-0. Number is required. 3. ASSIGNEE NAME AT	ondence address (or Cha //122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT/ ess an assignee is ident n in 37 CFR 3.11. Comp	nge of ' ' Indicated. Use	Correspondence ution form of a Customer E PRINTED ON		ap to rnativ single or a t attor II be or typ he pa g an :	3 registered paten rely, e firm (having as a sgent) and the nam meys or agents. If printed. ee) step in the first patents are a second patents are a sign assignment.	memb es of u no nam	er a 2o to e is 3	cument has	
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Advance Order - # of Copies				The Director is he	ne Director is hereby authorized to charge the required fee(s), any deficiency, or credit any rerpayment, to Deposit Account Number (enclose an extra copy of this form).					
	SMALL ENTITY state	ıs. See	37 CFR 1.27.	☐ b. Applicant is no	o long	ger claiming SMAI	LEN	TITY status. Sec 37 CF	R 1.27(g)(2).	
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeords of the United Sta	uired) v tes Pate	vill not be accepted ent and Trademark	d from anyone other the Office.	han ti	he applicant; a regi	stered a	ittorney or agent; or th	e assignee or	other party in
Authorized Signature						Date				
Typed or printed name					Registration No.					
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.3 U.S.C. USPT rden, sh O NOT	11. The informatic 122 and 37 CFR O. Time will vary tould be sent to the SEND FEES OR	on is required to obtain 1.14. This collection in depending upon the in the Chief Information On COMPLETED FORM	n or n is esti indiv Office IS TO	etain a benefit by t imated to take 12 i idual case. Any co r, U.S. Patent and D'THIS ADDRESS	he publ minutes mment Traden i. SENI	ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Depa D TO: Commissioner I	by the USPT g gathering, p ne you requir rtment of Co or Patents, P.	O to process) reparing, and e to complete mmerce, P.O. O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/800,163	10/800,163 03/12/2004		Vijay Deshmukh	67272-8062.US01	9062	
77042	7590	05/05/2010		EXAMINER		
Perkins Coie	LLP		LE, MIRANDA			
P.O. Box 1208			ART UNIT	PAPER NUMBER		
Seattle, WA 98	111-1208		2159			
			DATE MAILED: 05/05/2010			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 211 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 211 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/800,163 DESHMUKH ET AL. Notice of Allowability Examiner Art Unit MIRANDA LE 2159 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to RCE file 02/23/2010. The allowed claim(s) is/are 1-3,5,6,9-12,14,15,18,39 and 40. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 02/23/2010 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other .

Primary Examiner, Art Unit 2159

/Miranda Le/

Art Unit: 2159

Application/Control Number: 10/800,163

DETAILED ACTION

This communication is responsive to a RCE amendment filed 02/23/2010.

Statement of Reasons for Allowance

Claims 1-3, 5-6, 9-12, 14-15, 18, 39-40 are allowed.

The following is an examiner's statement of reasons for allowance.

The present invention is directed to a method for creating a file information database. A storage server having a directory structure is scanned or "file walk". Data regarding the directory structure is collected. Identification (ID) numbers are assigned to directories in the directory structure according to a depth first search (DFS) order. A table including the ID numbers is then written to store the results of a file walk so that they can easily be accessed and searched by an administrator.

All independent claims 1, 10, 39 recite, or similarly recite, in combination with the remaining elements, the methods/machine readable medium comprising:

- writing a data structure including the first ID number, the second ID number and a relation between the first directory and the second directory, wherein the relation indicates that the first directory is an immediate child of the second directory, and wherein the data structure is traversable based on the ID numbers to determine relationships between directories of the storage server:
- receiving a request to determine an immediate child or parent of a specified directory, wherein the specified directory is the first directory or the second directory:
- searching the data structure for any relation indicative that the specified directory is a child or a parent in said relation, wherein said searching produces as a result said relation between the first directory and the second directory; and
- determining the immediate child or parent of the specified directory based on said any relation.

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The closest prior art, Lord et al (US 6,961,909), Perttunen et al (US 6,563,521), Watkins et al (US 6,457,017) show similar methods for providing a web browser display of a selected part of a tree-structured directory of hierarchically-related entities in a computer system. However, Lord et al, Perttunen et al, and Watkins et al., singularly or in combination, still fail to anticipate or render the above cited limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James K. Trujillo, can be reached at (571) 272-3677. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Application/Control Number: 10/800,163 Page 4

Art Unit: 2159

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Miranda Le/ Primary Examiner, Art Unit 2159 04/09/2010